UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
NATIONAL VEHICLE AND FUEL EMISSIONS LABORATORY
2565 PLYMOUTH ROAD
ANN ARBOR, MICHIGAN 48105-2498

February 10, 2010

OFFICE OF
AIR AND RADIATION

Todd Fagerman, Manager
Car/Truck Certification
Ford Motor Company
Allen Park Test Lab
1500 Enterprise Drive, Suite 3W 200
Allen Park, Michigan 48101-2053

Dear Mr. Fagerman:

Thank you for your letter dated February 5, 2010, on behalf of Ford Motor Company (Ford), in which Ford requested approval for a maintenance interval equivalent to the service interval (oil change interval) for the Diesel Exhaust Fluid (DEF) refill for Selective Catalytic Reduction (SCR) emission control systems pursuant to 40 CFR 86.1834-01(b)(7)(ii) . Specifically, your request is applicable to chassis certified diesel vehicles for Model Years (MY) 2011 and 2012. Subject to the conditions in this letter, we approve the maintenance interval equal to the service interval for 2011 and 2012 MY chassis certified heavy-duty diesel vehicles.

Your letter states that the required DEF refill maintenance for the SCR is a new technology which did not exist prior to 1980. Your letter indicates that Ford will use SCR emission control systems on chassis certified heavy-duty diesel vehicles to help meet the NOx standards. To maintain performance and emissions compliance through successful operation of this technology, frequent DEF refills are required. You have stated that to meet a 100,000 mile allowable service interval, the DEF storage tank for you vehicles would need to be on the order of 80 gallons, and would require more vehicle space to package such a tank than is possible to accommodate with your vehicle applications. You have stated that a larger tank necessary to meet a longer service interval, for example a two oil change interval, is an unrealistic scenario because of limited vehicle architecture space and associated excess weight. You stated that cargo space, towing capacity and fuel efficiency are highly valued attributes for medium-duty vehicles and that any losses in any of these would be unacceptable to your customers. You stated that there would not be sufficient space in the engine compartment or in the vehicle undercarriage to accommodate a DEF tank necessary to achieve a longer maintenance schedule. You also note weight constraints that would be implicated by a longer maintenance schedule. Therefore, EPA believes based on the information Ford has provided that its chassis certified heavy-duty diesel trucks do not yet have the carrying and storage capacity required for the quantity of DEF needed to satisfy an allowable service interval longer than that requested by Ford.

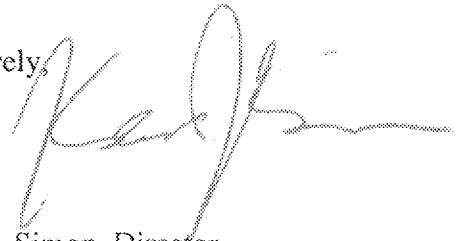
EPA believes the SCR emission control system is a critical emission-related component as defined by 40 CFR 86.1864-01(b)(6)(ii). As such, Ford needs to demonstrate that there is a

reasonable likelihood that the requested DEF maintenance refill will be performed in use. Your letter states that the vehicles will be designed and equipped to ensure compliance with the requested maintenance intervals and emission standards. This will be accomplished by equipping all of the vehicles with a DEF driver warning system that uses an escalating audible and visual warning chain that provides the vehicle operator with adequate time to re-fill the DEF helping to ensure emissions compliance. As a backstop for ensuring emissions compliance and the likelihood of DEF re-fill, your vehicles will also be equipped with escalating and sufficiently onerous levels of inducement, including speed reduction and a final action of forced idle. You also stated that DEF will be readily available to consumers through Ford dealerships, some gas stations and truck stops, and a newly created DEF locater website developed and maintained by the Department of Energy. Ford will also provide a 1-800 customer service number for roadside assistance service to address unforeseeable circumstances with obtaining DEF at a given time and location.

After reviewing your request, EPA believes that longer refill intervals than that requested by Ford would require larger and heavier DEF tanks, and the information provided by Ford indicates that the requested DEF refill interval noted above approximates the maximum feasible maintenance intervals associated with reasonable DEF tank sizes. The maintenance interval requested ensures that the functions and operational efficiency of such vehicles are not overly compromised. Based on this information we believe the intervals noted above are warranted. Therefore, EPA is approving the maintenance interval for the SCR catalysts system that Ford requested for their chassis certified diesel trucks, i.e., that the maintenance interval be equivalent to the service interval (oil change interval). This approval is limited to the 2011 and 2012 model years.

Please contact Mr. Linc Wehrly of my staff at (734) 214-4286 if you have any questions about the decisions set forth in this letter.

Sincerely,



Karl J. Simon, Director
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